AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-19 (Canceled)

Claim 20 (Original) A method for making a semiconductor chip comprising:

forming a diffusion region in a semiconductor substrate;

forming an insulated trench structure in said substrate which surrounds said diffusion region; and

forming electrical connections on said trench structure and said substrate which receive a control voltage whereby an electric field is produced to control a current flowing is said diffusion region.

Claim 21 (Original) The method for making a semiconductor chip according to claim 20, further comprising source and drain regions formed in said diffusion on each side of said gate.

Claim 22 (Original) The method of making a semiconductor chip according to claim 20, wherein said diffusion region forms a resistor which has a resistance controlled in response to said control voltage.

Claim 23 (Original) The method of making a semiconductor chip according to claim 20, wherein said diffusion layer is formed in a well of polysilicon deposited is said trench structure.

Claim 24 (Original) A method for making a semiconductor chip comprising:

forming first and second diffusion regions in a semiconductor substrate;

forming a trench structure around said first and second diffusion regions; and

forming a contact on said trench structure and said substrate for controlling current through said diffusion regions.

Claim 25 (Original) The method for making a semiconductor chip according to claim 24, further comprising:

forming first and second gates over said first and second diffusion regions.

Claim 26 (Original) A method for making a semiconductor chip comprising:

forming multiple trench structures on a substrate;

forming multiple diffusion regions in said trench structures in said substrate; and

forming multiple contacts on each of said trench structures and said substrate for controlling current through said diffusion regions.

Claim 27 (Original) The method for making a semiconductor chip according to claim 26, further comprising:

forming a gate electrode over each of said diffusion regions; and

forming drain and source connections on opposite sides of said gate electrodes.